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The Relationship of Open Communication to Organizational Success: An Exploratory Study of the Indirect Hypothesis

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"Keep your channels of communication open," is a common prescription for the executive. This advice, according to Willits (1972), is grounded in "the implicit hypothesis that open communication will contribute to organizational performance" (p. 91). Unfortunately, the teachers, managers, and theorists of organizational communication have been unable to explain HOW open communication contributes to organizational success.

Three observations are in order. First, researchers from Bavelas (1950) and Leavitt (1951) through O'Reilly and Roberts (1977) and Klauss (1977) have found links between open communication and organizational success. Second, these links are neither consistent nor statistically strong. Third, open communication can have negative consequences such as overload and conflict (Rosengren, 1965). Considering these factors, Redding (1972) argued:

> One must still acknowledge that the considerable number of studies, when taken all together do "add up." The consistency of the findings from a wide variety of studies is itself persuasive. And this consistency seems to make two conclusions inescapable: that openness of communication is (a) a crucial dimension of organizational communication, and (b) an essential ingredient in any overall managerial climate associated with organizational effectiveness (p. 386).

An examination of our explanations of the open communication - organizational success link is appropriate. Initially the assumptions were made that this was a simple and direct relationship. Open communication leads to satisfaction. Restricted communication leads to productivity. But Guetzkow and Simon (1955) challenged the assumption that the relationship is simple. Instead, Guetzkow (1965) argued that the relationship is complex and dependent on the nature of the task as a conditional variable. This has led to a contingency theory explanation in the "if, then" form. If the task is complex, if the environment is dynamic, if

the environment is uncertain, then open communication leads to both productivity and satisfaction. If the task is simple, if the environment is stable, if the environment is predictable, then restricted communication leads to both productivity and satisfaction. This explains the inconsistent results but not the weak links.

To date there has been no serious challenge of the assumption that the relationship is direct. Yet, the Guetzkow and Simon (1955), Indik, Georgopoulos, and Seashore (1961), and Willits (1967) studies allowed for intervening variables. If intervening variables exist then we might argue that open communication leads to x and x leads to organizational success. Two possible candidates for such an x are innovativeness from Rogers and Agarwala-Rogers (1976) and trust from Willits (1967).

This paper presents an exploratory study intended to determine if an indirect relationship between open communication and organizational success is possible. To simplify the analysis only one intervening variable was employed. If the relationship is indirect we would expect to find (a) statistically significant zero order and first order correlations between open communication and innovativeness, (b) statistically significant zero order and first order correlations between innovativeness and organizational success, (c) statistically significant zero order correlation between open communication and organizational success, and (d) statistically non-significant first order correlation between open communication and organizational success.

METHODOLOGY

The general design of this study was an intercorrelational analysis of the responses of ninety-four people to three perceptual measures.

PEOPLE. The people who participated in this study were ninety-four members of six organizational groups. Group one (n = 8) was an academic department in a medium sized college. Group two (n = 9) was also an academic department in a medium sized college. Group three (n = 12) was an academic department in a large university. Group four (n = 9) was an administrative department in a large university. Group five (n = 31) was an administrative department in a medium sized corporation. Group six (n = 25) was a service department in a state government agency. Of the ninety-four people, forty-eight were male and forty-six were female. They ranged in age from nineteen to sixty-four, in organizational tenure from one month to fifteen years, and in educational attainment from tenth grade to Ph.D.

MEASURES. Perceived Open Communication was operationalized as the summed response to a thirty-five item questionnaire derived from Rogers (1976). Perceived Innovation was operationalized as a scaled response to the question, "How much do you agree or disagree with the statement - NEW IDEAS ARE CONSTANTLY BEING TRIED -- as it applies to your department? Perceived Success was operationalized as a scaled response to the question, "How much do you agree or disagree with the statement, "ON THE WHOLE, THIS ORGANIZATION IS SUCCESSFUL" - as it applied to your department?" In order to test the consistency of the perceptions of the departments, interrator reliability coefficients were computed for each measure. As reported in Table 1, the reliability of each of the three measures is statistically

significant at the .001 level of confidence. In order to test the validity of observed differences among departments, correlation ratios were computed for each measure. As reported in Table 1, the discriminant power of each of the three measures is statistically significant at the .001 level of confidence. In addition, as a test of instrument reliability, the Kuder-Richardson coefficient of equivalence was computed for the Open Communication Measure. The r of .799 was statistically significant at the .001 level

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Table 1 about here

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of confidence.

ANALYSIS. Analysis of data was performed on a CDC 6400 computer using library programs for correlation with transgeneration and partial correlation at the State University of New York at Buffalo Academic Computing Center.

RESULTS

The zero order correlation matrix for the three measures is presented in Table 2. As expected, all three correlation coefficients are statistically

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Table 2 about here

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significant. This finding justifies our questioning of the true nature of the observed relationships. The partial (first order) correlation matrix is presented in Table 3. Note that with the effects of Innovation removed,

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Table 3 about here

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the correlation between Open Communication and Perceived Success is no longer statistically significant.

DISCUSSION

Obviously the simple design of this study has important methodological limitations which should be noted. First, only one intervening variable was included. The fact that the partial correlation between open communication and organizational success did not reduce to zero suggests that there may be other intervening variables (e.g., trust). Second, the method assumes a direct relationship between open communication and innovativeness and between innovativeness and organizational success. These may both be indirect relationships with additional intervening variables. This problem may be compounded by the simplistic, transparent measures of innovativeness and success. Third, the methodology did not specify conditional variables nor casual links. Fourth, the use of subjective measures rather than hard indices assumes that people accurately perceive and report organizational reality. Fifth, the aggregation of the six groups is a questionable procedure.

With these limitations in mind, some tentative conclusions can be drawn. Most importantly, all of the expectations of an indirect relationship were realized. The statistically significant correlation between open communication and organizational success disappeared when the effects of innovativeness were removed. This challenges the assumption of a direct relationship. Thus our explanations of HOW open communication (independent variable) contributes to organizational success (dependent variable) may come to rely on both conditional variables (task, environment, etc.) and on mediating variables (innovativeness). This sort of explanation suggests

that we analyze earlier research to determine whether conditional variables were different (challenging the assumption of a simple relationship) and whether the design allowed mediating variables to emerge (challenging the assumption of a direct relationship). This will also help us to design research to find additional intervening variables.

The introduction of intervening variables complicates our explanation of the contribution of open communication to organizational success. Figure 1 shows the sort of model we may have to employ to explain that open communication leads to innovation which can help us to discover the best solution to

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Figure 1 about here

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a complex problem, but which can cause us to consider unnecessary solutions to simple problems. Obviously the model presented is incomplete. No probabilities are attached to the relationships. No preferences are indicated. Other dependent variables (performance, satisfaction, etc.) conditional variables (environmental uncertainty, environmental dynamism, etc.), and intervening variables (trust, stability, influence, etc.) are excluded.

In short, we already knew that the contribution of open communication to organizational success is not simple, but complex. This study has suggested that the contribution may not be direct, but mediated.

REFERENCES

Bavelas, A. "Communication Patterns in Task Oriented Groups," Journal of the Acoustical Society of America, 22, 1950.

Guetzkow, H. and H. Simon. "The Impact of Certain Communication Nets on Organization and Performance in Task Oriented Groups," Management Science, 1, 1955.

Guetzkow, H. "Communication in Organizations," In J. March, ed. Handbook of Organizations, Rand McNally, 1965.

Indik, B., B. Georgopoulos, and S. Seashore. "Superior-Subordinate Relationships and Performance," Personnel Psychology, 14, 1961.

Klauss, R. "Development and Application of the Bass-Klaus Model of Interpersonal Communication," paper presented to the Academy of Management, 1977.

Leavitt, H. "Some Effects of Certain Communication Patterns on Group Performance," Journal of Abnormal and Social Psychology, 46, 1951.

O'Reilly, C. and K. Roberts. "Communication and Performance in Organizations" in R. Taylor, M. O'Connell, R. Zawacki, and D. Warrick, eds. Academy of Management Proceedings '77, Academy of Management, 1977.

Redding, W.C. Communication Within the Organization, Industrial Communication Council, 1972.

Rosengren, W. "Communication, Organization, and Conduct in the 'Therapeutic Miliew'," Administrative Science Quarterly, 9, 1964.

Rogers, D. "Specific Communication Behaviors Expected in Relatively Open Organizational Communication Systems," in M. Cassata and R. Palmer, eds. Reader in Library Communication, Microcard, 1976.

Rogers, E. and R. Agarwala-Rogers. "Organizational Communication" in G. Hanneman and W. McEwen, eds. Communication and Behavior, Addison-Wesley, 1975.

Willits, R. "Company Performance and Interpersonal Relations," Industrial Management Review, 7, 1967.

TABLE 1

Analysis of the Instruments

	Interrater Reliability			Discriminate Validity		
	r	z	p<	eta	F	p<
Communication	.55	.618	.001	.84	42.64	.001
Innovation	.62	.725	.001	.78	27.52	.001
Success	.55	.618	.001	.84	42.51	.001

TABLE 2

The Correlation Matrix

	Innovation		Success	
	r	p<	r	p<
Communication	.564	.001	.465	.001
Innovation			.665	.001

TABLE 3

The Partial Correlation Matrix

	Innovation		Success	
	r	p<	r	p<
Communication	.384	.001	.146	n.s.
Innovation			.552	.001

Figure 1

A Hueristic Model of Relationships Among Open Communication, Innovativeness, Task Complexity, and Organizational Success